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## PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q88048

Masaru KURAMOTO, et al.

Appln. No.: 10/537,611

Group Art Unit: 2812

Confirmation No.: 4984

Examiner: Not Yet Assigned

Filed: June 3, 2005

For: NITRIDE SEMICONDUCTOR SUBSTRATE AND NITRIDE SEMICONDUCTOR  
DEVICE USING SAME

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

#### MAIL STOP AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A form and listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

1. Japanese Patent Application Publication No. 2001-102307, published April 13, 2001 (with English abstract).
2. Japanese Patent Application Publication No. 2001-320120, published November 16, 2001 (with English abstract).
3. Japanese Patent Application Publication No. 11-261160, published September 24, 1999 (with English abstract).

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

INFORMATION DISCLOSURE STATEMENT

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filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The present Information Disclosure Statement is being filed thirty days or fewer from the communication from a foreign patent office and a Statement Under 37 C.F.R. §1.704(d) is attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses herewith a copy of a corresponding Japanese Office Action, dated June 13, 2006, and an English translation of the pertinent portions thereof which cites such documents and indicates the degree for relevance found by the foreign office.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Respectfully submitted,

  
Howard L. Bernstein  
Registration No. 25,665

Date: July 13, 2006

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

Q88048



#### Reason

The inventions related to the following claims of the present application could have been easily invented by a person with ordinary knowledge of technology in the field to which the inventions belong prior to the filing of this application based on the inventions recited in the publications below, which had been distributed in Japan or abroad, or inventions which became publicly available via telecommunication lines, prior to the filing of this application, and therefore cannot receive a patent according to the stipulations of Article 29, Paragraph 2 of the Japan Patent Law.

Note (for the cited literature, see the List of Cited Literature)

- Regarding Claims 1, 2, 4 through 7, 9 through 13, 15 through 18, 20, and 21  
Cited literature 1, 2, and 3

The technology of forming a good nitride layer by arranging a polycrystalline Al nitride compound on the mask material during crystal growing is disclosed in Cited Literature 2 (see especially the example of embodiment of Figure 10), and the technology of growing crystals with low dislocation by arranging a polycrystalline material in the crystal growing space is disclosed in Cited Literature 3 (see especially paragraph 0077). Thus, a person skilled in the art could easily conceive of applying the technology of reducing dislocation by arranging the polycrystalline material disclosed in Cited Literature 2 and 3 on the mask portion in the nitride semiconductor substrate and manufacturing method for same recited in Cited Literature 1, consisting of mask type crystal growing, thereby arriving at the constitution of the inventions relating to Claims 1, 2, 4 through 7, 9 through 13, 15 through 18, 20, and 21.

- Regarding Claims 3, 8, 14, and 19  
Cited Literature 1, 2, and 3

Arranging a gap on the periphery of the mask member as in the limitations described in Claims 3, 8, 14, and 19 is disclosed in Cited Literature 2.

#### List of Cited Literature

1. Japanese Unexamined Patent Application Publication 2001-102307
2. Japanese Unexamined Patent Application Publication 2001-320120
3. Japanese Unexamined Patent Application Publication H11-261160



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**STATEMENT UNDER 37 C.F.R. § 1.704(d)**

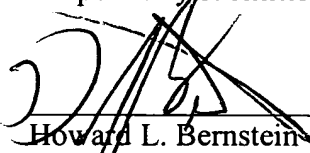
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and that the communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of said Information Disclosure Statement.

Respectfully submitted,

  
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